

Work Order ID 74309

Wednesday, September 28, 2011 11:35:28 A



Page 1

Item ID: D3690-041

Accept



Setup Start



Revision ID:

Item Name: Glareshield Assembly

Stop



Start Date: 9/28/2011 Start Qty: 2.00

Required Date: 10/14/2011 Req'd Qty: 2.00



Cust Item ID:

Customer:

Reference:

Approvals:

Process Plan: M.L.J

Date: 9/29/11 Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

Draw Nbr

Revision Nbr

D3690

Rev C

100

Pick Kit

0.00



Packaging

Memo

0.00

Packaging

(2)

FF

12-03-19

110

Small Fab

0.00



Small Fab

Memo

0.00

Small Fab

1- transfer drill D3697-041 and D3698-1 in D3690-1 and assemble as per dwg D3690

2- scribe batch # and part # as per dwg

(2)

FF

12-03-19

120

QC5- Inspect part completeness to step on W/O

0.00



QC

Memo

0.00

Quality Control

W

12-03-19

(2)



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Page 2

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Date:

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Date:

Stop



Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

130



SprayPaint

SprayPaint

0.00

Memo

0.00

Spray Painting

1- Mask hatched areas (6 pls) on inside of the part prior to painting as per dwg

2-Paint D3690-041 assy flat black using Basf Glasurit 22 Line code SFA39.50  
per Dart QSI 005 4.2

AB 12-3-21

140



QC

QC14- Inspect Spray Paint

0.00

Memo

0.00

Quality Control

12/3/2011

12.03.22 ①

160



QC

QC21- Final Inspection - Work Order Release

0.00

Memo

0.00

Quality Control

ML5 12/03/22

mrf 12-03-22



# Picklist Print

Wednesday, September 28, 2011 11:35:23 AM

Page 1

Work Order ID: 74309

Parent Item: D3690-041

Parent Item Name: Glareshield Assembly



Start Date: 9/28/2011

Required Date: 10/14/2011

Start Qty: 2.00

Required Qty: 2.00

Comments: IPP Rev:A 08-04-29 new issue DD verified by:ec  
IPP Rev:B 08-07-14 revB as per dwg DD verified by:ec  
IPP Rev:C 08-09-08 added painting DD verified by:EC  
IPP Rev:D 08-10-07 revC as per dwg DD verified by:EC

| Component Item ID/<br>Item Name | Replacement<br>Item ID | Mfg/<br>Purch | Bin<br>Item | Primary<br>Location | Last<br>Location | Route<br>Seq ID | Unit of<br>Measure | Qty on<br>Hand | Qty per Kit | Total<br>Qty | Qty<br>Issued | Date<br>Issued | Status |
|---------------------------------|------------------------|---------------|-------------|---------------------|------------------|-----------------|--------------------|----------------|-------------|--------------|---------------|----------------|--------|
|---------------------------------|------------------------|---------------|-------------|---------------------|------------------|-----------------|--------------------|----------------|-------------|--------------|---------------|----------------|--------|

AN960JD3



Washer

Purchased

No

Each

145.0000

4

(2) FF 12-03-19

CR3213-4-03



rivet

Purchased

No

Each

100.0000

70

(2) FF 12-03-19

D3690-1



Glareshield

D3697-041



Tube Assembly

D3698-1



Support Angle

Manufactured

No

Each

0.0000

2

(2) FF 12-03-19

Manufactured

No

Each

0.0000

2

(2) FF 12-03-19

Manufactured

No

Each

7.0000

2

(2) FF 12-03-19

Location

ST241A

41656

59244

Loc Qty

7

2

5

Loc Code

2





# Picklist Print

Wednesday, September 28, 2011 11:35:24 AM

Page 2

Work Order ID: 74309

Parent Item: D3690-041

Parent Item Name: Glareshield Assembly



Start Date: 9/28/2011

Required Date: 10/14/2011

Start Qty: 2.00

Required Qty: 2.00

MS20426AD3-5

Purchased

No

Each

13,156.00

4



Rivet



② FF 12-03-19

Location

Loc Qty

Loc Code

ST316

13156

4179

1342

4444

5654

4533

6160

4

Wednesday, September 28, 2011 11:35:24 AM

Shop Packet Print

Page 2





|                                 |               |                             |
|---------------------------------|---------------|-----------------------------|
| <b>DART AEROSPACE LTD</b>       |               | <b>Work Order:</b> 74309    |
| <b>Description:</b> Glareshield |               | <b>Part Number:</b> D3690-1 |
| <b>Inspection Dwg:</b> D3690    | <b>Rev:</b> C | <b>Page 1 of 1</b>          |

**FIRST ARTICLE INSPECTION CHECKLIST**  
**THERMOFORMING SECTION**

| Description                                       | Accept | Reject | Method of Inspection | Comments |
|---|--------|--------|----------------------|----------|
| Shape Definition                                  |        |        |                      |          |
| Free of visual flaws (bumps, cracks, voids, etc.) |        |        |                      |          |
|   |        |        |                      |          |
|   |        |        |                      |          |
|   |        |        |                      |          |

**Measured by:** \_\_\_\_\_

**Date:** \_\_\_\_\_

**TRIMMING SECTION**

| Drawing Dimension | Tolerance | Actual Dimension | Accept | Reject | Method of Inspection | Comments |
|-------------------|-----------|------------------|--------|--------|----------------------|----------|
| 2.20              | +/-0.030  |                  |        |        |                      |          |
| 3.55              | +/-0.030  |                  |        |        |                      |          |
| 0.040             | Min       |                  |        |        |                      |          |
|                   |           |                  |        |        |                      |          |
|                   |           |                  |        |        |                      |          |
|                   |           |                  |        |        |                      |          |
|                   |           |                  |        |        |                      |          |
|                   |           |                  |        |        |                      |          |
|                   |           |                  |        |        |                      |          |
|                   |           |                  |        |        |                      |          |
|                   |           |                  |        |        |                      |          |
|                   |           |                  |        |        |                      |          |
|                   |           |                  |        |        |                      |          |
|                   |           |                  |        |        |                      |          |

**Measured by:** \_\_\_\_\_

**Date:** \_\_\_\_\_

**Audited by:** \_\_\_\_\_

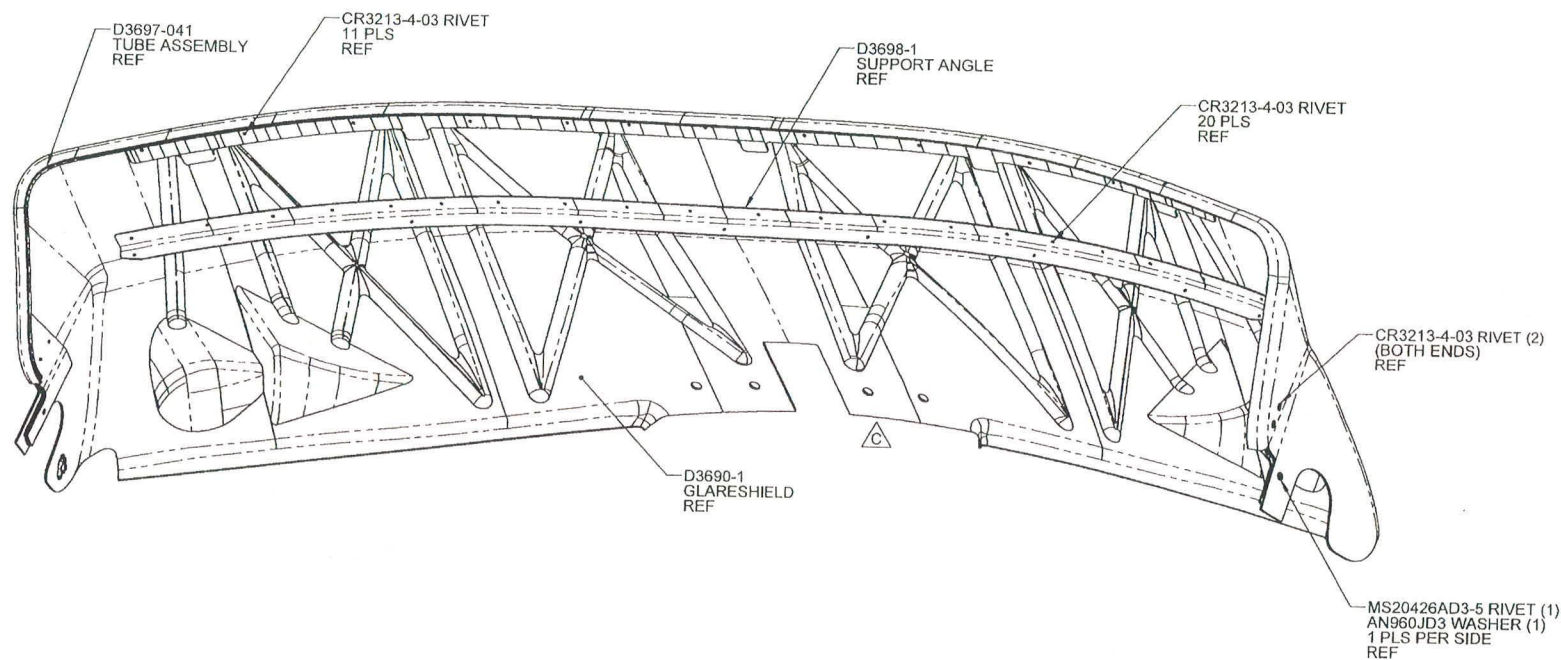
**Date:** \_\_\_\_\_

**Preliminary Approval:** \_\_\_\_\_

**Date:** \_\_\_\_\_

| Rev | Date     | Change          | Revised by | Approved |
|-----|----------|-----------------|------------|----------|
| A   | 08.09.12 | New Issue       | KJ/DL      |          |
| B   | 10.11.17 | Dwg Rev updated | KJ         |          |





# PART LIST

| QTY<br>-041 | PART NUMBER  | DESCRIPTION               |
|-------------|--------------|---------------------------|
| X           | D3690-041    | GLARESHIELD ASSEMBLY      |
| 1           | D3690-1      | GLARESHIELD               |
| 1           | D3697-041    | TUBE ASSEMBLY             |
| 1           | D3698-1      | SUPPORT ANGLE             |
| 2           | AN960JD3     | WASHER (OR NAS1149DN332J) |
| 2           | MS20426AD3-5 | RIVET                     |
| 35          | CR3213-4-03  | RIVET                     |

## D3690-041 GLARESHIELD ASSEMBLY

STOP COPY  
 RETURN TO  
 ENGINEERING  
 UNCONTROLLED COPY  
 SUBJECT TO AMENDMENT  
 WITHOUT NOTICE  
 WORK ORDER  
 NO. 74309 M.C.J

RELEASED  
28-09-16-11

|  |   |     |          |
|--|---|-----|----------|
| C  | SHEET 1 PL MS20426AD3-5 RIVET WAS MS20426AD3-4, CR3213-4-03 RIVET WAS MS20470AD3-4, WASHER QTY WAS 6 (VIEWS UPDATED ACCORDINGLY). RIVETS ON SHEET 1 CHANGED TO REF QTY. RIVETS ON SHEET 2 CHANGED TO "HARD" CALLOUTS. SHADING REMOVED FROM ALL VIEWS FOR CLARITY. | AJS | 08.09.02 |
| B  | ADD FINISH COAT & 1.0 TYP. SHEET 2 ZONES A, B & C, 5; ADD MIN THICKNESS. SHEET 3 ZONE A, B  | RF  | 08.06.24 |
| A  | NEW ISSUE   | RF  | 08.05.26 |
| REV.   | DESCRIPTION   | BY  | DATE     |
| DESIGN   | RF  |     |          |
| DRAWN  | RF  |     |          |
| CHECKED  | J   |     |          |
| MFG. APPR.   | E   |     |          |
| APPROVED   | 40  |     |          |
| DE APPR.   | H   |     |          |
| DATE   | 08.09.02  |     |          |
| <b>DART AEROSPACE LTD</b><br>HAWKESBURY, ONTARIO, CANADA<br>DRAWING NO. D3690<br>TITLE GLARESHIELD ASSEMBLY<br>REV. C SHEET 1 OF 3<br>SCALE NTS<br>COPYRIGHT © 2008 BY DART AEROSPACE LTD<br>THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS COVENANT THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD. |   |     |          |

91 29/11





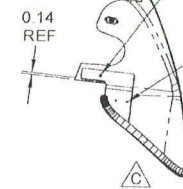
74309

△ C TRANSFER DRILL  $\phi 0.128$   
FROM D3698-1 TO D3690-1  
INSTALL  
CR3213-4-03 RIVET, 20 PL  
RIVET HEAD ON GLARESHIELD  
OUTSIDE SURFACE

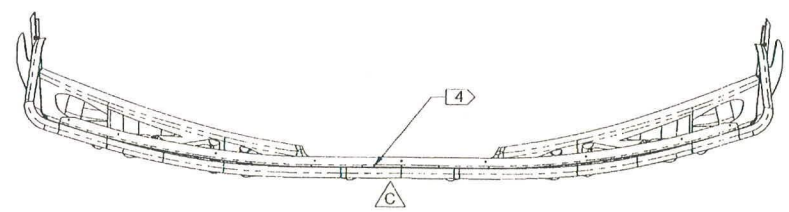
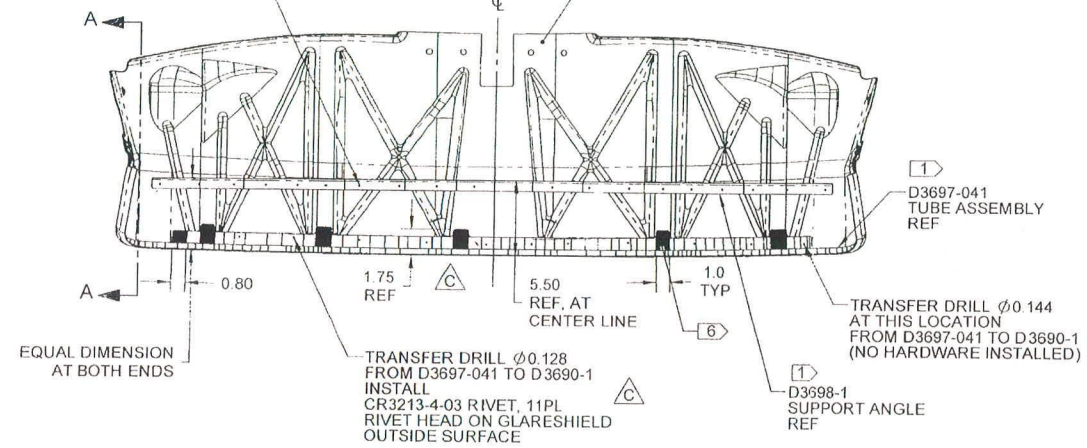
D3690-1  
GLARESHIELD  
REF

TRANSFER DRILL  $\phi 0.098$   
FROM D3697-041 TO D3690-1  
INSTALL  
MS20426AD3-5 RIVET  
AN960JD3 WASHER (ON GLARESHIELD  
OUTSIDE SURFACE)  
1 PER SIDE

TRANSFER DRILL  $\phi 0.128$   
FROM D3697-041 TO D3690-1  
INSTALL  
CR3213-4-03 RIVET 2  
BOTH ENDS



SECTION A-A



D3690-041 GLARESHIELD ASSEMBLY

- NOTES:
- 1) CENTER D3697-041 AND D3698-1 ON TO D3690-1
  - 2) FINISH: PAINT D3690-041 ASSY FLAT BLACK USING BASF GLASURIT 22 LINE CODE SFA39.50 PER DART QSI 005 4.2
  - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
  - 4) IDENTIFICATION: ETCH WITH DART P/N D3690-041 & B/N ON INSIDE OF PART
  - 5) WEIGHT: 2.98 lbs
  - 6) MASK HATCHED AREAS (6 PLS) ON INSIDE OF THE PART PRIOR TO PAINTING

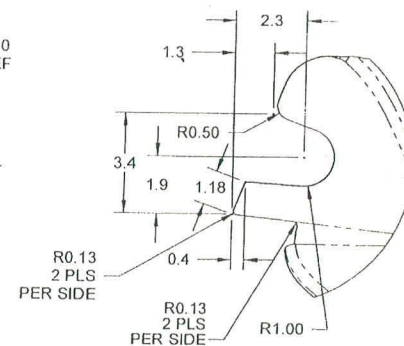
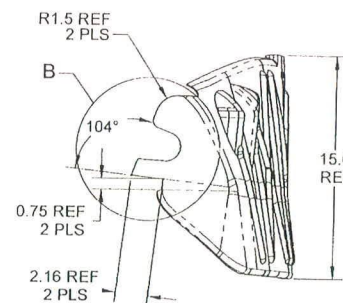
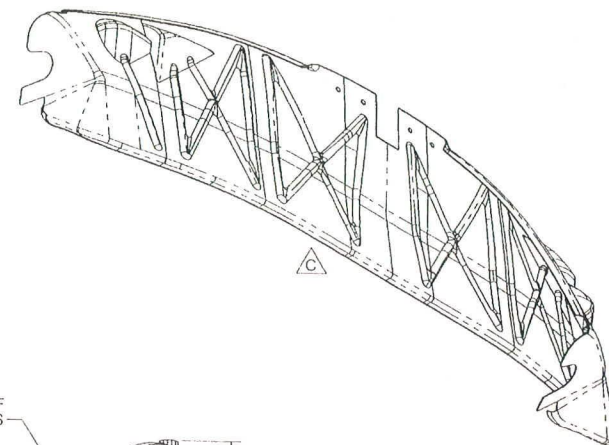
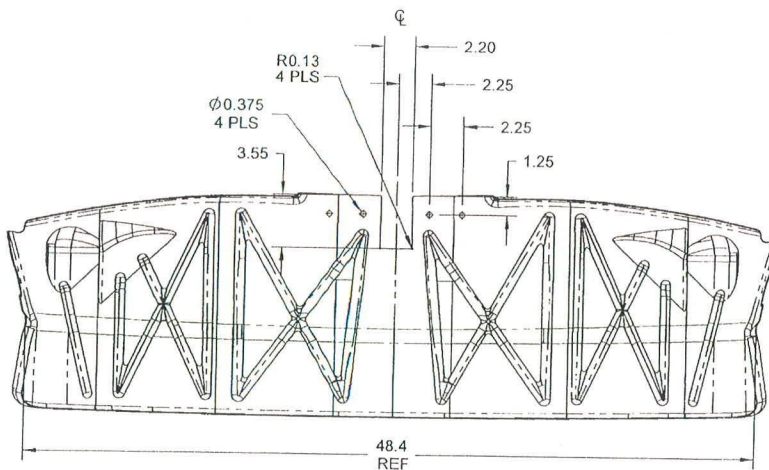
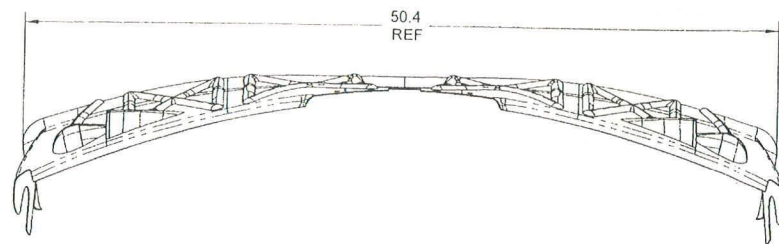
RELEASED  
08-09-14

|            |          |   |              |
|------------|----------|---|--------------|
| DESIGN     | RF       | <b>DART AEROSPACE LTD</b><br>HAWKESBURY, ONTARIO, CANADA  |              |
| DRAWN      | RF       |   |              |
| CHECKED    |          | DRAWING NO. D3690   | REV. C       |
| MFG. APPR. |          |   | SHEET 2 OF 3 |
| APPROVED   |          | TITLE   | SCALE        |
| DE APPR.   |          | GLARESHIELD ASSEMBLY  | NTS          |
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74309



# **D3690-1 GLARESHIELD**

## **NOTES:**

- 1) MATERIAL: F6006 SUEDE/POLISHED 701 BLACK FLAT LEXAN SHEET 0.093 THICK (REF DART SPEC MLEXS.093-F6006-02)
- 2) TOOLING: THERMOFORM PER MOLD DT9010 PER QSI 022 TRIM PER MOLD SCRIBE LINES EXCEPT WHERE NOTED
- 3) FINISH: NONE
- 4) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) UNITS: INCHES UNLESS OTHERWISE NOTED
- 6) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 7) IDENTIFICATION: NONE
- 8) WEIGHT: 2.5 lbs
- 9) MINIMUM THICKNESS AFTER FORMING IS 0.040

**RELEASED**  
02-07-14

**DETAIL B**  
SCALE 2X  
THIS VIEW FOR REFERENCE ONLY

|            |          |   |              |
|------------|----------|---|--------------|
| DESIGN     | RF       | <b>DART AEROSPACE LTD</b><br>HAWKESBURY, ONTARIO, CANADA  |              |
| DRAWN      | RF       |   |              |
| CHECKED    |          | DRAWING NO.   | REV. C       |
| MFG. APPR. |          | <b>D3690</b>  | SHEET 3 OF 3 |
| APPROVED   |          | TITLE   | SCALE        |
| DE APPR.   |          | <b>GLARESHIELD ASSEMBLY</b>   | NTS          |
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